

SUMMARY OF THE CLAIMS

Claim 1 (currently amended). A liquid crystal display device, comprising:
a pair of insulating substrates bonded via a sealing material, and
liquid crystal filled between said pair of insulating substrates,
wherein the bonded pair of insulating substrates form a cell having a center and a pair of ends, and
wherein a cell gap is formed so as to gradually and continuously increase from the[[a]] center of the cell to each of the pair of ~~an~~ ends of a display area of the cell at room temperature.

Claim 2 (currently amended). A liquid crystal display device, comprising:
a pair of insulating substrates bonded via a sealing material, and
liquid crystal filled between said pair of insulating substrates,
wherein the bonded pair of insulating substrates form a cell having a center and a pair of ends, and
wherein a cell gap is formed so as to gradually and continuously increase from the[[a]] center to each of the pair of ~~an~~ ends of a display area at room temperature, and
wherein -in a range of- the cell gap is limited so that no irregular display color appears.

Claim 3 (currently amended). The liquid crystal display device as defined in claim 1, wherein in said display area, the[[a]] cell gap is smaller in the center by less than 0.13 μ m than an average value of cell gaps on each of the pair of ~~an~~ ends at room temperature.

Claim 4 (currently amended). The liquid crystal display device as defined in claim 1, wherein in said display area, ~~the~~the cell gap is smaller in the center by 0.08 μ m or less than an average value of cell gaps on each of the pair of an ends at room temperature.

Claim 5 (currently amended). The liquid crystal display device as defined in claim 1, wherein a cell gap is formed so as to gradually increase from the center to each of the pair of an ends of said display area at room temperature, and a cell gap is formed so as to gradually decrease from the center to each of the pair of the ends of said display area at a high temperature.

Claim 6 (currently amended). The liquid crystal display device as defined in claim 3, wherein a cell gap is formed so as to gradually increase from the center to each of the pair of an ends of said display area at room temperature, and a cell gap is formed so as to gradually decrease from the center to each of the pair of the ends of said display area at a high temperature.

Claim 7 (currently amended). The liquid crystal display device as defined in claim 4, wherein a cell gap is formed so as to gradually increase from the center to each of the pair of an ends of said display area at room temperature, and a cell gap is formed so as to gradually decrease from the center to each of the pair of the ends of said display area at a high temperature.

Claim 8 (previously presented). The liquid crystal display device as defined in claim 1, wherein each of said pair of insulating substrates is a glass substrate having a thickness of 0.55mm or less.

Claim 9 (previously presented). The liquid crystal display device as defined in claim 1, wherein each of said pair of insulating substrates is a plastic substrate having a thickness of 0.55mm or less.

Claim 10 (original). The liquid crystal display device as defined in claim 1, wherein said liquid crystal display device is an STN liquid crystal display device.

Claim 11 (original). The liquid crystal display device as defined in claim 10, wherein an operating temperature ranges virtually between -20°C and 70°C.

Claim 12 (currently amended). A liquid crystal display device, comprising:
a pair of insulating substrates bonded via a sealing material, and
liquid crystal filled between said pair of insulating substrates,
wherein the bonded pair of insulating substrates crystal form a cell
having a center and a pair of ends, and
wherein a cell gap is smaller in the center than any other part of a display
area at room temperature, and
wherein such that a cell gap difference, which increasingly and continuously
gets larger with distance from the center, is set at a predetermined value amount
between the center and at least on one of the pair of an ends of said display area so
that at a high temperature in a range of the cell gap that no display defect occurs.

Claim 13 (new). The liquid crystal display device as defined in claim 1, wherein each of the pair of insulating substrates is cone-shaped.

Claim 14 (new). The liquid crystal display device as defined in claim 1, wherein each of the pair of insulating substrates forming the cell is concave inward.

Claim 15 (new). The liquid crystal display device as defined in claim 2, wherein each of the pair of insulating substrates is cone-shaped.

Claim 16 (new). The liquid crystal display device as defined in claim 2, wherein each of the pair of insulating substrates forming the cell is concave inward.

Claim 17 (new). The liquid crystal display device as defined in claim 12, wherein each of the pair of insulating substrates is cone-shaped.

Claim 18 (new). The liquid crystal display device as defined in claim 12, wherein each of the pair of insulating substrates forming the cell is concave inward.